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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MILLIPORE CORPORATION
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EXAMINER

OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,970

Applicant(s)

ZERMANI ET AL.

Examiner

Marianne S. Ocampo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-17-03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-12, 16, 24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-12, 16, 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/10/03 & 7/17/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner, *because they fail to show features claimed by claim 5-6.* Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 7-17-03 for Fig. 11 is: a) ☒ approved b) ☐ disapproved by the Examiner. *(see office action for more details)*
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to -- 37 CFR 1.114. Applicant's submission filed on 7-17-03 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *the portion of the inner wall being tapered outwardly wherein the taper is about 0 degrees to about -20 degrees toward the center line of the well, and the taper being about -7 degrees towards the vertical center line of the well, as in claims 5 - 6, must be shown or the features should be canceled from the claims. No new matter should be entered.*

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. Regarding the petition filed on 2-10-03 and 7-17-03 with regards to the entry of colored photographs depicting the claimed invention, since all requirements have been met (i.e. three sets of color photographs and black and white photocopies of those figures in color, and the specification has been amended to include the required paragraph mentioned in the last (final) office action, as in pages 2 – 3 of the Final office action mailed on 5-8-03), the petition is hereby granted. Furthermore, the proposed drawing correction filed on 7-17-03 regarding Figure 11 has been approved.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 3 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gasser et al. (US 5,715,741).

6. With regards to claim 1, Gasser et al. disclose a filtration device comprising:
- at least one well (defined by the pot wall 1), each well having an open top and a closed bottom having one or more holes (3) which allow liquid to pass through,
 - at least one piece of filter (in this instance, one filter element 2), positioned within each well and against the bottom of the well and a
 - a mechanical interlock (formed by uppermost shoulder of frame 4 formed integrally with the wall 1, 5) formed against a top of the filter (2) and,
 - the well (1) being formed of plastic and the interlock being one *skive* (the term “skive” has been defined and considered by the examiner to mean any structure which forms an interlock or preventing movement of the filter away from the bottom or a mechanical structure which retains the filter within the well), as in fig. 9 and cols. 5 – 7.

7. With respect to claim 2, Gasser et al. have disclosed the limitations of claim 1 above. Gasser et al. also disclose at least a portion of the inner wall (the lower portion towards the collar 5) being tapered inwardly as it progresses from the top of the well (1) toward the bottom of the well, as in fig. 9.

8. Concerning claim 3, Gasser et al. have disclosed the limitations of claim 1 above. Gasser et al. further disclose at least a portion of the inner wall (the lower portion towards the collar 5) being tapered inwardly as it progresses from the top of the well toward the bottom of

the well, wherein the taper is from about 0 degrees toward the vertical center line of the well to about 20 degrees toward the vertical center line of the well, as in fig. 9.

9. Regarding claim 10, Gasser et al. have disclosed the limitations of claim 1 above. Gasser et al. also disclose the *one or more pieces of* (i.e. at least one) filter (2) being made from a metallic material, as in col. 5, lines 15 – 21. For consistency in claim language, applicants are advised to amend claim 10 by changing the phrase “one or more pieces of” to “at least one” before the word “filter” in line 1, in order to be consistent with the claim language already used in base claim 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 11 – 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasser et al. (741).

12. Regarding claim 4, the limitation "about 7 degrees" is considered indefinite by the examiner. It is unclear what value is being referred by this phrase. Is it a value of 7 degrees (as mentioned in the original specification page 4, 2nd paragraph, line 3, or a value greater than 7 degrees (i.e. from 8 up to 20 degrees) or a value less than 7 degrees (i.e. from 6 degrees to 0)? Gasser et al. have disclosed the limitations of claim 1 above. Although Gasser et al. does not explicitly disclose the taper being about 7 degrees toward a vertical center line of the well (1), the taper (of the inner wall of the well (1), is measured to be less than 10 degrees, specifically between about 6 to 8 degrees, as in fig. 9, which would include about 7 degrees as claimed in claim 4. It is considered in this instance where claimed ranges (i.e. about 7 degrees) "overlap or lie inside ranges disclosed by the prior art" (i.e. lie in the disclosed range of about 6 – 8 degrees or less than 10 degrees as in fig. 9 of Gasser et al.), a prima facie case of obviousness exists. See case laws, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976) and In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) and In re Geisler, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997), and MPEP 2144.05, section I.

13. Concerning claim 11, Gasser et al. have disclosed the limitations of claim 1 above. Although Gasser et al. does not disclose the at least one (i.e. "one or more pieces of") filter being made of polymeric material recited in claim 11, it is considered obvious to one of ordinary skill in the art to modify the filter material from a metallic material to a plastic/polymeric material, particularly cellulose acetate, which is among those recited in claim 11, in order to provide an improved and alternative filter material which is lighter in weight and would not corrode (i.e.

corrosion resistant) compared to its metallic counterparts and for its desirable properties.

Cellulose acetate (which is one of the recited materials in claim 11) is known for its use as a filter membrane and notable for its toughness, high-impact strength and ease of fabrication (see Hawley's Condensed Chemical Dictionary, page 228 for properties of cellulose acetate).

14. With respect to claim 12, Gasser et al. have disclosed the limitations of claim 1 above. Although Gasser et al. does not explicitly disclose the type of plastic material which is used to form the device (i.e. the well/pot wall 1 of Gasser et al.), the case law *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) stated that a prima case of obviousness exists in a selection of a known plastic (such as those mentioned in claim 12) to make a container of a type made of plastics prior to the invention. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the material of construction of the device/pot wall of Gasser et al. from any plastic material to particularly one of those recited in claim 12, for example polyurethanes, for their known desirable properties including resistance to impact, weathering, acids and alkalies and have excellent hardness and rigidity (see Hawley's Condensed Chemical Dictionary, pages 906 – 907 for properties of polyurethanes).

15. With regards to claim 24, Gasser et al. have disclosed the limitations of claim 1 above. Although Gasser et al. does not disclose the at least one piece of filter being multiple pieces, it is considered obvious to one of ordinary skill in the art at the time of the invention to modify the number of filter elements (i.e. pieces of filter) from one to more than one (i.e.

multiple/plurality thereof) for a multiplied effect, in this instance, to increase available filtration surface area. The case law, In re Harza [274 F.2d, 124 USPQ 378 (CCPA 1960)], has provided that, in which a mere duplication of parts (in this instance, duplication of the filter pieces from one to more than one/multiple pieces) for a multiplied effect does not carry any patentable weight or significance unless a new or unexpected result is produced. See also M.P.E.P. section 2144.04 part VI paragraph B.

16. Claims 1, 5 – 6, 10 – 12, 16, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zermani (US 6,309,605 B1) in view of DeSalvo (US 5,284,586).

17. Concerning claim 1, Zermani discloses a filtration device (1) comprising:

- at least one well (2), each well (2) having an open top (bounded by planar portion 3) and a closed bottom (5) having one or more holes (6) which allow liquid to pass through
- at least one piece of filter (8, 27) positioned within each well (3) and against the bottom (5) of each well (2);
- a mechanical interlock (30) formed against a top of the filter (8, 27)
- the well (2) being formed of plastic and the interlock being one *skive* (the term “skive” has been defined and considered by the examiner to mean any structure which forms an interlock or preventing movement of the filter away from the bottom or a mechanical structure which retains the filter within the well, as in pages 1 – 9 and figure 6. Zermani fails to disclose the interlock being one or more skives (“skives” which have been defined by the applicants as

portions of the inner wall of the well that have been skived and rolled along the wall until it reaches the location of the filter to lock it in the well, and excluding thermal bonding and gluing techniques or use of expensive welding equipment such as ultrasonic welders, according to applicant's definition given by the response (Paper no. 7) in pages 5 – 6). Claim 1 is considered a product by process claim. The patentability of a product by process claim is based upon the product itself, eventhough the claim is limited and defined by process (in this instance, how the interlock is being formed or made, i.e. as a "skive" as defined by the applicants' response found in Paper no. 7, pages 5 – 6), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See In re Thorpe, et al., No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. In this instance, the interlock/seal formed by thermal bonding or gluing techniques taught by the prior art Zermani, performs the same exact function of a "skive", that is to retain or lock the filter (8, 27) in place within the well (2) and against the bottom (5) thereof. Although Zermani does not teach the punching and forming of a skive from a portion of the inner wall of the well to form the interlock which would keep the filter (8) in the well against the bottom (5) thereof, it is considered that the claimed invention (i.e. a filtration device having at least one well and at least one piece of filter positioned therein and a mechanical interlock against a top of the filter and the well being formed of plastic) is the same as, or obvious from the product of the prior art (Zermani), even if the product of the prior art (Zermani) had been made by a different process. Furthermore, it is also well known in the art of forming a filtration device the method of forming a mechanical interlock (i.e. forming it as a skive) as claimed by the applicants in claim

1(i.e. forming a *skive* (by means of a punching pin driving against a cavity/bore of a well such that the punching pin cuts a portion of the wall of the cavity and pushes (rolls down) that portion continuously downwards to form a mechanical interlock) to lock a filter in a well (i.e. depression or a container or vessel which could also any cup-shaped cavity/vessel having at least one opening at a bottom portion thereof) or a skive type of interlock being claimed by the applicants, as evidenced by De Salvo (US 5,284,586). DeSalvo teaches a mechanical interlock in the form of at least one skive (annular ring 26 formed from having a punching pin driving through a bore of a well 12 and rolling a portion of the inner wall of the bore downwards to lock a filter (20) in the well 12) which locks a filter (20) in a well (12) having an open top and a closed bottom having at least one hole/opening covered by the filter (20), as in fig. 4 and in cols. 2 – 4 and in claims 1 – 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the type of interlock used in the filtration device of Zermani, by adding the embodiment taught by DeSalvo, in order to provide an alternative design for the interlock which is also effective in locking the filter in the well, as well as can be formed in a simple manner and costs less to manufacture (see col. 2, lines 64 – 68 of DeSalvo), compared to seal or interlock taught by Zermani.

18. Regarding claim 5, the limitation “the vertical center line” lacks proper antecedent basis. Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani further discloses at least a portion of the inner wall being tapered outwardly as it progresses from the top of the well (near the opening) toward the bottom of the well (where the filter sits or in the

vicinity of the filter 27), and the taper is from about 0 degrees toward a vertical center line of the well to about -20 degrees toward the vertical center line of the well, as in fig. 6.

19. With regards to claim 6, in this claim, the limitation "the vertical center line" lacks proper antecedent basis. Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Although Zermani, as modified by DeSalvo, fails to teach the angle of the tapering outwardly of the at least a portion of the inner wall being about -7 degrees towards a vertical center line of the well, it is considered obvious to one of ordinary skill in the art at the time of the invention, to modify the tapering outwardly of the at least a portion of the inner wall of the well to any desired value, in particular about -7 degrees, as a matter of choice of the user, as well as depending upon the shape (i.e. degree of tapering of the sides) of the filter being placed in the well. If the filter has sides which taper outwardly to about -7 degrees, then to form the at least a portion of the inner wall to that specific degree of taper would be obvious in order to properly seat the filter in place in the well.

20. Concerning claim 10, Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani further discloses the at least one piece of (one or more pieces of) filter (8, 27) being made from a polymeric material, as in page 7.

21. With respect to claim 11, Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani also discloses the one or more pieces of filter (8, 27)

being made from a polymeric material selected from the following group of material consisting of nitrocellulose, cellulose acetate, polysulphones, polyethersulphones, polyarylsulphones, polyvinylidene fluoride, polyolefins, polyamides, PTFE, thermoplastic fluorinated polymers and polycarbonates, as in page 7, lines 5 – 14.

22. With respect to claim 12, Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani discloses the device (i.e. the well plate 1) being made of a material selected from the following group of materials consisting of polyolefins, polycarbonates, nylons, PTFE resins, ABS, acrylic and methacrylic resins and copolymers of acrylic and methacrylic resins, as in page 6, lines 23 - 31.

23. With regards to claim 16, Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani also discloses the device (1) having a number of wells (2) selected from the group consisting of 96, 384 and 1536, as in page 7, lines 29 – 32.

24. Concerning claim 24, Zermani, as modified by DeSalvo, has taught the limitations of claim 1 above. Zermani also discloses the at least one piece of filter being multiple (more than one) pieces and the skive or interlock/seal being formed at least on top of an upper surface of an uppermost filter, as in col. 5, lines 14 – 20. See case law, *In re Harza* [274 F.2d, 124 USPQ 378 (CCPA 1960)] in which a mere duplication of parts (in this instance, duplication of the filter pieces from one to more than one/multiple pieces) for a multiplied effect (in this instance, greater

filtration surface area and longer filter span) does not carry any patentable weight or significance unless a new or unexpected result is produced. See also M.P.E.P. section 2144.04 part VI paragraph B.

25. Regarding claim 26, Zermani discloses a filtration device (1, a multiwell plate) comprising:

- 96 wells (2), as in page 7, and each well (2) having an open top (bounded by planar portion 3) and a closed bottom (5) having one or more holes (6) which allow liquid to pass through,
- at least one piece of filter (8, 27) positioned within each well (3) and against the bottom (5) of each well (2), and
- a mechanical interlock (in the form of a seal 30) against a top of the filter (8, 27) and the well (2) being formed of plastic (thermoplastic) and the interlock (such as 30) being a portion of the well (i.e. those portions surrounding the sealing surface of the filter, which would be along and adjacent to the outer peripheries of the filter 8) which could be formed continuously from at least a portion of an inner wall of the well and the interlock remaining attached to and as a portion of the inner wall, the portion of the well being thermally bonded to the sealing surface of the filter (8), as in pages 1 – 9 and figure 6. Zermani fails to disclose the interlock being one or more skives (“skives” being defined as *portions of the inner wall of the well that have been skived and rolled along the wall until it reaches the location of the filter to lock it in the well*, and

excluding thermal bonding and gluing techniques or use of expensive welding equipment such as ultrasonic welders, according to applicant's definition given by the response (Paper no. 7) in pages 5 – 6). Claim 1 is considered a product by process claim. The patentability of a product by process claim is based upon the product itself, eventhough the claim is limited and defined by process (in this instance, how the interlock is being formed or made, i.e. as a "skive" as defined by the applicants' response found in Paper no. 7, pages 5 – 6), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. In this instance, the interlock/seal formed by thermal bonding or gluing techniques taught by the prior art Zermani, performs the same exact function of a "skive", that is to retain or lock the filter (8, 27) in place within the well (2) and against the bottom (5) thereof. Although Zermani does not teach the punching and forming of a skive from a portion of the inner wall of the well to form the interlock which would keep the filter (8) in the well against the bottom (5) thereof, it is considered that the claimed invention (i.e. a filtration device having at least one well and at least one piece of filter positioned therein and a mechanical interlock against a top of the filter and the well being formed of plastic) is the same as, or obvious from the product of the prior art (Zermani), even if the product of the prior art (Zermani) had been made by a different process. Furthermore, it is also well known in the art of forming a filtration device the method of forming a mechanical interlock (i.e. forming it as a skive) as claimed by the applicants in claim 1 (i.e. forming a skive *(by means of a punching pin driving against a cavity/bore of a well such that the punching pin cuts a portion of the wall of the*

cavity and pushes (rolls down) that portion continuously downwards to form a mechanical interlock) to lock a filter in a well (i.e. depression or a container or vessel which could also any cup-shaped cavity/vessel having at least one opening at a bottom portion thereof) or a skive type of interlock being claimed by the applicants, as evidenced by De Salvo (US 5,284,586).

DeSalvo teaches a mechanical interlock in the form of at least one skive (annular ring 26 formed from having a punching pin driving through a bore portion of the inner wall of the bore of a well 12 and rolling a portion of the inner wall of the bore downwards to lock a filter (20) in the well 12) which locks a filter (20) in a well (12) having an open top and a closed bottom having at least one hole/opening covered by the filter (20), as in fig. 4 and in cols. 2 – 4 and in claims 1 – 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the type of interlock used in the filtration device of Zermani, by adding the embodiment taught by DeSalvo, in order to provide an alternative design for the interlock which is also effective in locking the filter in the well, as well as can be formed in a simple manner and costs less to manufacture (see col. 2, lines 64 – 68 of DeSalvo), compared to seal or interlock taught by Zermani.

26. Claims 2 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zermani and DeSalvo, as applied to claim 1 above, and further in view of Cohen et al. (US 3,730,352).

27. Concerning claims 2 – 4, in these claims, the limitation “the vertical center line” lacks proper antecedent basis. Zermani as modified by DeSalvo, has taught the limitations of

claim 1 above. Zermani as modified by DeSalvo, fail to teach at least a portion of the inner wall being tapered inwardly as it progresses from the top of the well toward the bottom of the well (claim 2), wherein the taper is from about 0 degrees toward a vertical center line of the well to about 20 degrees towards the vertical center line (claim 3), or the taper is about 7 degrees toward the vertical center line of the well (claim 4). Cohen et al. teach a filtration device (14) (i.e. multi-well plate) similar to that of Zermani, comprising at least one well (46), wherein each of the well (46) has an open top and a closed bottom (being closed by the filter 40, 42) having at least one or more holes for a fluid/liquid to pass through, and a mechanical interlock formed by at least a portion of an inner wall of the well (46), and the at least a portion of the inner wall being tapered inwardly (i.e. forming a frustoconical shape) as it progresses from the top of the well toward the bottom of the well, as in figs. 3 - 4 and cols. 1 - 8 (claim 2). It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the filtration device of Zermani as modified by DeSalvo, by adding the embodiment taught by Cohen et al., in order to provide an improved filtration device which has the ability to increase the rate of filling of the wells (col. 6, lines 21 - 22 of Cohen et al.), thereby increasing the rate of filtration of liquid therethrough.

With regards to the degree of tapering of at least a portion of the inner wall, i.e. having a taper of from about 0 degrees toward a vertical center line of the well to about 20 degrees towards the vertical center line (claim 3), or the taper is about 7 degrees toward the vertical center line of the well (claim 4), it is considered a matter of choice of the user, and the tapering being a result-effective variable, in which the values of from about 0 degrees toward a vertical center line of the well to about 20 degrees towards the vertical center line (claim 3), and/or about 7 degrees toward

the vertical center line of the well (claim 4), are considered optimum values of the result-effective variable, which serve to increase/decrease the rate of flow through the well. If the user of the well desired the flow of liquid to be faster through the well, an increased/dramatic tapering (upto 20 degrees) toward the vertical center line should be the taper of the inner wall. However, if the user desired a much slower (but not stagnant) flow rate of liquid, then a taper of about 7 degrees might be sufficient.

Response to Arguments and Amendments

28. Applicant's arguments and amendments filed on 7-17-03 with respect to claims 1 –6, 10 – 12, 16, 24 and 26 have been considered but are moot in view of the new grounds of rejection based on Gasser et al. (US 5,715,741) and with regards to the combination of prior art references, namely Zermani (US 6,309,605), DeSalvo (US 5,284,586) and Cohen (3,730,352), the arguments are deemed unpersuasive. The examiner has replaced the previously applied prior art WO 00/66268 (Zermani) with the US Patent 6,309,605 to Zermani, which is considered a qualified prior art under 103 (a).

29. In response to applicant's arguments against the references (i.e. Zermani and DeSalvo) individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

1986). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for the combination of Zermani and DeSalvo, has been set forth at the end of the rejection of claim 1 in particular, the provision of a seal which is simpler and less costly to manufacture, as well as tamper-resistant, and provides a greater strength retention of the filter, given by DeSalvo, particularly in cols. 1, lines 35 – 39 and col. 2, lines 60 – 68.

30. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a continuous roll of inner wall material...to lock the filter in place") is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

31. This action is **NON-FINAL**.

Allowable Subject Matter and 35 USC 112 Rejection

32. Claim 27 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action. Claim 27 recites the term "each **layer** of filter" in the last line which lacks proper antecedent basis. It is however, has been considered to be a typographical error, and should have been written as "each *piece* of filter".

33. The following is a statement of reasons for the indication of allowable subject matter: the closest prior art include Gasser et al., Zermani, DeSalvo and Cohen et al. mentioned above. None of these prior art and those searched, have disclosed or rendered obvious a filtration device having the combination of limitations recited in claim 27, including the at least one piece of filter (in each well) being multiple pieces sequentially arranged in the well and sealed to the well by a skive formed between each piece of filter.

Conclusion

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

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35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

36. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

M.S.O.


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1